

Battery Charger



The user's manual can be seen at the following link:
<https://si.shimano.com>

IMPORTANT NOTICE

- Contact the place of purchase or a distributor for information on installation and adjustment of the products which are not found in the user's manual. A dealer's manual for professional and experienced bicycle mechanics is available on our website (<https://si.shimano.com>).
- Do not disassemble or modify the product.



For safety, be sure to read this user's manual thoroughly before use, and follow it for correct use.

Important safety information



Consult your place of purchase or a distributor regarding items requiring replacement.



Be sure to observe the following instructions in order to avoid burns or other injury from fluid leakage, overheating, fire, or explosion.

DANGER

- Do not get the battery charger wet and do not touch or hold it while it is wet or with wet hands. If this is not observed, issues with operation or electric shocks may occur.
- Do not use the battery charger when it is covered with a cloth or other material. Doing so may cause the heat to build up and the case may become deformed, or fire, ignition, or overheating may occur.
- Do not disassemble or modify the battery charger. If this is not observed, electric shocks or injury may occur.
-  Do not heat the battery or expose it to flames. If this is not observed, combustion or bursting of the battery may occur.
- Use an AC adapter with a USB port with a voltage of 5.0 V DC and with a current equal to or higher than 1.5 A DC. If the one with a current lower than 1.5 A DC is used, the AC adapter may heat up, potentially causing a fire, smoke, overheating, destruction, electric shock, or burns.
-  Do not deform, modify, disassemble, or apply solder directly to the battery. If this is not observed, leakages, overheating or bursting may cause fire, burns or other injury to occur.
- Do not touch the metal terminals with metal items such as hairpins. If this is not observed, short circuits, overheating, burns or other injuries may occur.

WARNING

- If the battery does not become fully charged after 4 hours of charging, stop charging. If this is not observed, fire, bursting, ignition, or overheating may occur.
- Do not place this product in water or sea water, and do not allow the terminals to get wet. If this is not observed, fire, bursting, ignition, or overheating may occur.
- Use the included USB cable. Failure to do so may cause a charging error or failure to connect to the PC due to overheating.
- When connecting or disconnecting the USB cable, be sure to hold the cable by the plug part. Failure to do so may cause a fire or electric shock. If the following symptoms are observed, stop using the device and contact the place of purchase. A fire or electric shock may be caused.
 - If heat, acrid smell, or smoke is coming out from the plug part.
 - There may be a bad connection inside the plug part.
- If it thunders while charging with an AC adapter with a USB port, do not touch the device, bicycle, or the AC adapter. If lightning strikes, electric shocks may occur.
- Use an AC adapter with a USB port with a voltage of 5.0 V DC and with a current equal to or higher than 1.5 A DC. If one with a current lower than 1.5 A DC is used, a charging error may occur or the AC adapter may heat up, leading to a fire.
- Do not use a USB hub when connecting the cable to a PC USB port. This may cause a charging error or fire due to overheating.
- Be careful not to damage the charging cable. Do not damage, process, forcibly bend, twist or pull it, bring it near hot objects, place heavy objects on it or bundle it tightly together. If they are used while damaged, fire, electric shocks or short circuits may occur.

CAUTION

- Disconnect the USB cable when performing maintenance.

Notice

- Use the product indoors, and avoid outdoors, environments with high humidity, and locations exposed to rain or wind.
- Do not place this device on a dusty floor when using it.
- Place this device on a stable surface such as a table when using it.
 - If it is subject to an impact or vibration, it may stop charging.
- Do not place any objects on top of the main body or its cable.
- Do not bundle the cables.
- Do not connect the battery charger to PC when it is on standby. This may cause a PC failure depending on its specifications.
- Connect the battery charger directly to the USB port on a PC, without using an intermediate device such as a USB hub.
- Do not hold the main body by the cables when carrying it.
- Do not apply excessive tension to the cables.
- Do not wash this device or wipe it using detergents.
- Use the product under the supervision of someone responsible for safety and upon receiving usage instructions. Do not allow anyone (including children) with reduced physical, sensory, or mental capacity, or those without experience or knowledge, to use the product.
- Do not allow children to play near the product.
- The product is not guaranteed against natural wear and deterioration from normal use and aging.

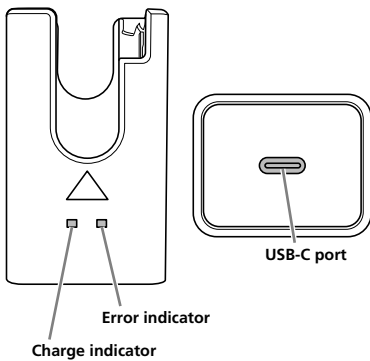
This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Main specifications

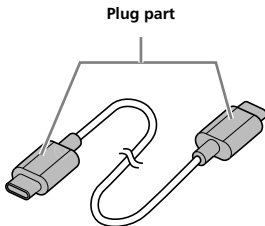
Input	5.0 V DC, 1.5 A
Output	8.7 V DC, 0.62 A
Dimensions	30.8 mm x 53.3 mm x 26.8 mm (W x H x D)
Weight	Approximately 30 g
Operating temperature	0 - 45°C

* The above values exclude the included USB cable.

Names of parts



- USB cable (included with this product)



Special battery

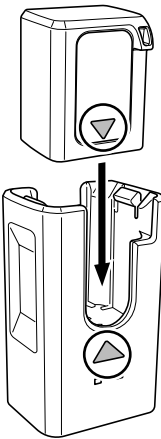
This is a special charger for charging SHIMANO lithium-ion batteries (BT-DN320). Never connect other batteries. Doing so may cause bursting or ignition.

- * Fully understand the precautions for use before using the product.

Charging method

The battery can be charged by using an AC adapter with a USB port or connecting the battery charger to the USB port of a PC.

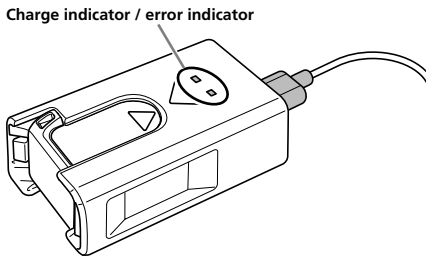
1. Install the battery to the battery charger. Insert the battery with the mark of the battery charger aligned with the mark of the battery. Then, push it in firmly until you feel a click.



2. Connect the USB cable to the USB port of the battery charger. After charging has started, the charge indicator (orange) lights up.

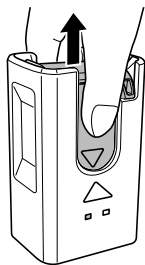
If the error indicator flashes and the charge indicator does not light up, the product is not charging. Refer to “When charging is not possible.”

- * The error indicator will turn off after 1 hour.



- * The charging time is about 1 hour. (Note that the actual charging time will vary depending on the remaining battery level.) Depending on the specifications of the AC adapter or ambient temperature, the charging time may be longer.

3. When the charge indicator (orange) switches off, charging is complete. Remove the battery from the battery charger, as indicated in the figure.



4. Disconnect the USB cable, and keep it at the location specified in the precautions.

When charging is not possible

If charging does not start, there may be a connection problem, foreign substances present, or the temperature may be outside the operating temperature range.

1. Reconnect the battery and USB cable, and try charging again.
2. If the error indicator flashes, the ambient temperature during charging or battery main body temperature may fall outside the operating temperature limits. Store the battery charger and battery for a while in an environment at an appropriate temperature, then try charging again.

If none of the above (1 or 2) is the case, the battery charger or battery may be faulty. Please contact your place of purchase. If the battery is charged by using PC, also check the following:
3. Check whether another USB device or multiple EC-DN100s are connected to the PC at the same time.
- * If the charge indicator does not light up or goes out soon, the battery may be fully charged. Check the remaining battery level using the compatible rear derailleur. If the battery is low or dead, contact the place of purchase or a bicycle dealer.

This symbol on your product, literature, or packaging reminds you that this product must be taken to separate collection at the end of its working life. Do not dispose of this product as unsorted municipal waste but instead take it for recycling. By ensuring the product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. For info on your nearest recycling point, check with your local waste authority.

SHIMANO

SHIMANO NORTH AMERICA BICYCLE, INC.
One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003

SHIMANO EUROPE B.V.
High Tech Campus 92, 5656 AG Eindhoven, The Netherlands Phone: +31-402-612222
Only EU General Contact : contactshimano@shimano-eu.com

MADISON (A DIVISION OF H.YOUNG (OPERATIONS) LTD)
Roebuck Way, Knowlhill, Milton Keynes, Buckinghamshire, MK5 8HL, United Kingdom

SHIMANO INC.
3-77 Oimatsu-cho, Sakai-ku, Sakai City, Osaka 590-8577, Japan

CE UK
CA